

PADDED ZERO BIAS SCHOTTKY DETECTORS

Detectors with internal attenuators are often requested. They are typically used in circuits where an improved RF match is needed or where the power levels applied are higher than is typical for low level detectors. Frequently, they are used in laboratory applications with associated instruments such as broadband power leveling or monitoring. These detectors are all zero bias, making them convenient to use.



Features:

- Superior Flatness vs. Frequency
- Wide Frequency Range
- Improved Return Loss
- Higher Power Handling

Applications:

- Transmitter Monitoring
- Missile Guidance Systems
- Input to Low-Noise Amplifiers
- Broadband Or Narrowband ECM Receivers
- Power and Signal Monitors
- Doppler Radar and Beacon Receivers
- Matched units available for Multi-channel Receivers, Amplitude Comparator Systems and Discriminators
- Laboratory Test Equipment

Frequency Range (GHz)	Part (1) Part (1)	Flatness vs Frequency (+/-dB)		Internal Attenuation (dB)	Low Level Sensitivity (mV/mW)(2)	Standard Case Styles	Optional Case Styles
		Frequency	TSS (dBm)				
2 - 4	ACSP2579NZ	0.2	-45	6	500	C3	C8,C15
0.01 - 8	ACSP2539NZ	0.5	-45	6	500	C3	C8,C15,C32
7.9 - 8.4	ACSP2518NZ	0.1	-45	6	500	C3	C8,C15,C32
7.9 - 8.4	ACSP2519NZ	0.1	-48	3	1000	C3	C8,C15,C32
0.01 - 12.4	ACSP2663NZ	0.5/octave	-45	6	500	C3	C8,C15,C32
0.01 - 18	ACSP2544NZ	0.5/octave	-45	6	500	C3	C15,C32
0.01 - 18	ACSP2551NZ	0.5/octave	-44	7	400	C3	C15,C32
5 - 18	ACSP2521NZ	0.5/octave	-44	6	500	C3	C15,C32
0.01 - 20	ACSP2643NZ	0.5/octave	-46	3	1000	C3	C15,C32
0.01 - 20	ACSP2644NZ	1.0	-44	7	500	C3	C15,C32

NOTES:

- 1) Available in both negative and positive polarities, substitute "N" or "P" in part number.
- 2) Measured into an open circuit load (>10k ohm).
- 3) Video protection is available on most models. This feature helps to prevent damage to the detector diode from incidents occurring at the video port. Transient electromagnetic spikes, static contact, or voltage surges can easily damage a detector diode. A video protection diode will clamp the voltage at a value less than the detector breakdown voltage. NOTE: Inclusion of this protection will cause the output voltage to compress and clamp. This occurs at about +10dBm input to the detector. If operation above +10dBm is required then the output protection should be modified or excluded. Adding a suffix "X" at the end of the model number will exclude the video protection feature. Contact the factory for assistance.

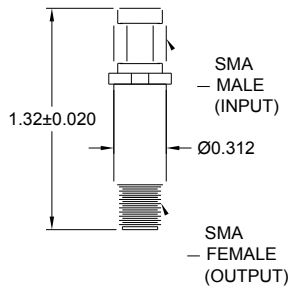


ENVIRONMENTAL SPECIFICATIONS:

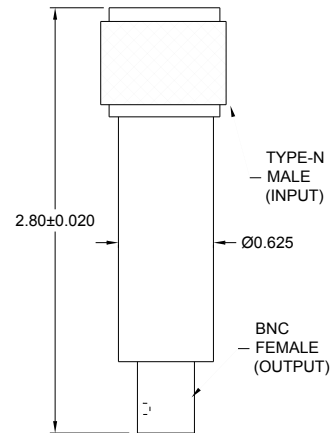
MIL-E-5400, MIL-STD-202, MIL-E-16400
 Storage Temp: -65°C to +150°C
 Humidity: MIL-STD-202F, M103, Cond B
 Shock: MIL-STD-202F, M213, Cond B
 Altitude: MIL-STD-202F, M105, Cond B
 Vibration : MIL-STD-202F, M204, Cond B
 Thermal Shock: MIL-STD-202F, M107, Cond A
 Temperature Cycle: MIL-STD-202F, M105C, Cond D
 Maximum Input Power: +23dBm

SCREENING :

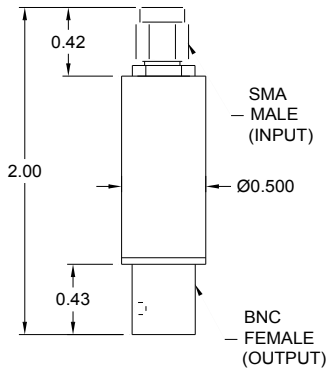
Standard Screening:
 Internal Visual per MIL-STD-883, Method 2017
 Temperature Cycle: -65°C to +100°C, 10 cycles
Optional High-Rel Screening (Ref MIL-PRF-38534):
 Internal Visual per MIL-STD-883, Method 2017
 Stabilization Bake per MIL-STD-883, Method 1008
 Temperature Cycle per MIL-STD-883, Method 1010
 Constant Acceleration per MIL-STD-883, Method 2001
 Burn-in per MIL-STD-883, Method 1015
 Leak Test per MIL-STD-883, Method 1014
 External Visual per MIL-STD-883, Method 2009



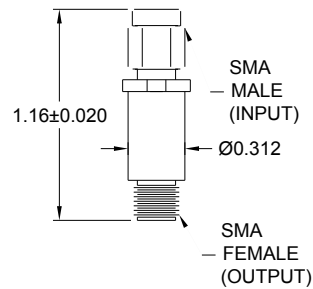
CASE STYLE C3



CASE STYLE C8



CASE STYLE C15



CASE STYLE C32

Part Number Ordering Information:

Example: ACSP2663NZC3
 ACSP2663: Padded Zero Bias Schottky Detector, 0.01 – 12.4GHz
 N: Negative output polarity
 Z: Zero bias
 C3: Package type